Normative Influence and its effect on Goal Commitment and Task Performance

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Normative Influence and Its Effect on Goal Commitment and Task Performance

An Astract of a Thesis by

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The Problem. This study investigated the effect of need for achievement (nAch), need for approval (nAp), social influence, and depression on goal commitment and postperformance. It was hypothesized positive social influence would be associated with high commitment and postperformance. It was also hypothesized high nAch would be associated with high commitment and postperformance. It was also hypothesized high nAp would be associated with high commitment and postperformance.

Procedure. Measures of nAch, nAp, and depression were completed by 165 college students who later performed a word formation task. A positive, neutral, or

negative social influence manipulation was implemented during the experimental task.

Findings. A significant effect of nAch on goal commitment was found. A nearly significant effect of social influence on postperformance was found.

Conclusions. High nAch is associated with high goal commitment. Positive social influence is associated with high performance and negative social influence is associated with low performance.

Recommendations. Organizations using goal setting theory need to be aware of the nAch-commitment relationship. These organizations need to foster positive opinions of work tasks to increase productivity. Further research is needed to identify what other aspects of social influence affect performance.

Introduction

Goal setting has consistently been found to be an effective motivator for performance. The success rate of studies correctly utilizing goal setting as a means to increase performance is over 90% (Locke & Latham, 1990). Pinder (1984), in a review of all major theories of work motivation, concluded "goal setting theory has demonstrated more scientific validity to date than any other theory or approach to work motivation" and "it probably holds more promise as an applied motivational tool than does any other approach" (p. 169). Given that goal setting can be effectively used as a motivator for performance, it is important to understand the factors that affect the effectiveness of goal setting.

Goal commitment is an important factor in the goal-performance relationship. High commitment is associated with higher performance than low commitment (Locke & Latham, 1990). Several factors such as self-efficacy, locus of control, and valence of the goal have been found to affect goal commitment (Locke & Latham, 1990). One factor that may affect goal commitment that has received relatively little attention is social influence.

Turner (1991) broadly defined social influence as "the processes whereby people directly or indirectly influence the thoughts, feelings, and actions of others" (p. 1). Social influence permeates our daily lives. When we are depressed, our friends try to cheer us up. Political candidates ask us to vote for them. The Sunday sermon attempts to shape our religious beliefs. It is quickly possible to see the examples of influence are endless. It would be nearly impossible to escape from being a target of the messages of the agents of social influence. Because of the importance of goal setting theory and the prevalence of social influence in our lives, it is appropriate to study the relationship between the two. The purpose of this study was to investigate the effect of social influence on goal commitment.

Review of the Literature

Goal Setting Theory

The basic premise of goal setting theory is that when goals are set, people will work to achieve those goals. Thus, goal setting theory suggests that goals are immediate regulators of human action. According to the theory, the type of goal affects the level of performance such that hard, specific

goals will improve performance until one reaches the limit of one's ability. This is referred to as the goal difficulty function (Locke & Latham, 1990). Research has consistently supported the theory, showing that hard goals produce higher performance than easy goals as long as the goals are within the person's ability (Locke, Shaw, Saari & Latham, 1981; Locke & Latham, 1990). Research has also consistently found specific goals produce higher performance than vague, nonquantitative goals or no assigned goals (Locke et al., 1981; Locke & Latham, 1990). Thus, hard, specific goals produce better performance than easy, vague goals (Locke et al., 1981; Locke & Latham, 1990). These findings generalize across a wide range of subjects, countries, settings, tasks, and time spans (Locke & Latham, 1990). Types of subjects have included adults and children, blacks and whites, and, normals and retardates (Latham & Yukl, 1975; Masters, Furman, & Barden, 1977; Principato, 1983). Studies have been done in the United States, Canada, England, Israel, and Japan (Earley, 1986; Erez & Zidon, 1984; Latham & Marshall, 1982; Matsui, Kakuyama, & Onglatco, 1987). Tasks used most frequently in goal setting studies have included: air traffic control, anagrams,

arithmetic, assembly, bargaining, clerical tasks, course work performance, exercise, listing nouns, logging, management simulations, maze learning, perceptual speed, reaction time, reading, sales, sewing, and weight loss (Locke & Latham, 1990). Studies finding the positive effects of goal setting have used time spans ranging from one minute to three years (Locke & Latham, 1990). Few theories have received such overwhelming support as goal setting theory.

The effect of goals on action has been explained through the direct goal mechanisms of effort, persistence, and direction. Goals motivate people to exert effort on goal-relevant tasks. The amount of effort put forth will be positively related to the difficulty of the goal. Goals also motivate people to persist in goal-relevant activity. People will work longer when the goals are hard and specific than if the goals are easy or vague. Finally, specific goals provide direction for relevant behaviors needed to achieve the goals (Locke et al., 1981; Locke & Latham, 1990).

Several factors have been associated with the effectiveness of goal setting. Goal setting theory suggests knowledge of results (KR) of performance

moderates the relationship between goals and performance. Goals regulate performance better when feedback is provided than when feedback is absent. The presence of one without the other can be insufficient to improve performance. KR without goals has been found to be insufficient for improving performance (Bandura & Simon, 1977; Latham, Mitchell & Dossett, 1978; Nemeroff & Cosentino, 1979). Goals without KR can also be insufficient to improve performance (Becker, 1978; Komaki, Barwick & Scott, 1978; Strong, Lawrence & Fowler, 1978). Thus, combining both goals and KR improves performance (Erez, 1977; Ivancevich & McMahon, 1982; Pritchard et al., 1988; Warner & Mills, 1980).

Another important factor associated with effectiveness of goal setting has been goal commitment. Goal commitment refers to the degree of determination to try to achieve a goal. The three mechanisms of effort, persistence, and direction are thought to operate automatically if the person is committed to the goal and decides to engage in goal-relevant behavior. Goal setting is thought to be ineffective for improving performance when there is no commitment to the goal. Locke et al. (1981) suggest

that if a person is not trying to achieve a goal, then no goal really exists. A goal may exist externally but not be relevant to the person. Locke and Latham (1990) suggest commitment can moderate the effect of goals on performance. As the goal becomes progressively more difficult, performance should also progressively increase more for those with high commitment than those with low commitment.

Some confusion has existed between the terms commitment and acceptance. Some researchers distinguish the construct of goal acceptance from goal commitment. Goal commitment refers to the degree of determination to try to achieve a goal, whereas, goal acceptance refers to the degree a person accepts a goal assigned by another person. Goal commitment is a more general measure of determination without consideration of the goal source (Locke et al., 1981). Most researchers use the terms interchangeably without regard to the intended subtle distinction because many studies measuring goal commitment have assigned goals to the subjects, thus incorporating goal acceptance (Locke & Latham, 1990). The practical distinction between the terms, therefore, may have little value

at the present time. The term goal commitment will be used in the remainder of this study.

A number of studies have found a significant relationship between commitment and performance. Earley and Kanfer (1985) had subjects construct class schedules and found a significant effect of commitment on performance. Commitment was measured by responses to three questions; (1) To what extent will you take the goal assigned to you by the experimenter for producing schedules? (1 = *completely reject*, 5 = *completely accept)* (2) How committed are you to attaining the goal assigned to you by the experimenter? (1 = *completely uncommitted*, 7 = *completely committed*) (3) On a scale of 1 to 9, where 1 is *completely reject the goal* and 9 is *completely accept the goal*, to what degree do you accept the goal set? Subjects with higher commitment produced more class schedules than subjects with low commitment. Riedel, Nebeker, and Cooper (1988) had subjects perform a clerical task with subjects assigned to one of several incentive conditions. The study measured commitment through the use of self-reports. Results indicated a significant effect of commitment on performance.

Hollenbeck, Williams, and Klein (1989) assigned subjects to a public or private goal condition. Goals were either self-set or assigned for grade point performance. Commitment was measured with a nine-item self-report questionnaire, with each item having a Likert scale ranging from 1 to 5, with strongly agree and strongly disagree serving as anchors. Examples of the individual questions are; (1) I am strongly committed to pursuing this GPA goal. (2) I am willing to put forth a great deal of effort beyond what I'd normally do to achieve this GPA goal. (3) Quite frankly, I don't care if I achieve this GPA goal or not. (4) There is not much to be gained by trying to achieve this GPA goal. Goal commitment was found to significantly account for 13% of the variance in a measure of GPA performance across conditions.

Johnson and Perlow (1992) had subjects perform a computerized simulation of an air traffic controller task. Goal commitment was assessed using a four-item, 7-point scale addressing goal importance, intended effort, commitment, and affect toward failure. Subjects performed nine trials and goals were assigned on trials 2, 4, and 7. A significant effect of

commitment was found. A number of other studies have also found a significant effect of commitment on performance (Erez, 1986; Erez & Arad, 1986; Erez, Earley, & Hulin, 1985; Locke & Shaw, 1984; Wofford, 1982).

Several studies have failed to find a significant effect of commitment on performance. Pritchard and Curtis (1973) assigned subjects to a goal or no goal condition and had subjects perform a card sorting task. Subjects in the goal condition had higher performance than the no goal condition, but no effect of commitment was found. Yukl and Latham (1978) conducted a field study with female typists in a large corporation. Subjects were randomly placed in an assigned goal condition or a participatively set condition. Goals were set weekly over 10 consecutive weeks and lines typed per week were used as a measure. Results indicated difficult goals led to higher performance than easy goals, but a significant relationship between commitment and performance was not found. Mento, Cartledge, and Locke (1980) assigned subjects to one of three levels of goal difficulty. Subjects performed a perceptual speed task in which subjects had to determine how many numbers in a row

were the same as the circled numbers to the left of each row. Goal commitment was unrelated to effort and performance.

It may have been difficult for these researchers to show the effect of commitment on performance because subjects generally are highly committed to the goals of the task, restricting the variability in measures of commitment (Locke & Latham, 1990). When researchers specifically try to increase variability, the effect of commitment on performance can be shown empirically. Variability can be increased by using within subject designs and by measuring commitment with Likert-like scales rather than a dichotomous response such as yes or no (Erez & Zidon, 1984).

Since commitment has been found to be critical for the effectiveness of goal setting, further research has been conducted to determine factors that affect commitment. Several factors have been identified that affect goal commitment.

Expectancy and Self-Efficacy. Expectancy refers to the perceived likelihood that hard work or effort will result in good performance (Vroom, 1964). Self-efficacy refers to one's beliefs about how well one can perform the task. Persons with high expectancy of

success should be more likely to be highly commited to the goal. Subject's self-rated expectancy of success has been found to significantly affect commitment (Huber & Neale, 1986; Mento et al., 1980).

Valence and Instrumentality. Valence refers to the importance or attractiveness of a particular outcome. Instrumentality refers to the perceived degree of relationship between good performance and attainment of an outcome (Vroom, 1964). When one values an outcome and believes good performance will result in attaining the outcome, goal commitment should be high. When one does not value an outcome or believes performance will not result in attaining the goal, goal commitment should be low. Several studies have found significant relationships between valence and/or instrumentality and goal commitment (Mento et al., 1980; Oldham, 1975; Oliver & Brief, 1983; Yukl & Latham, 1978).

Publicness. When others are aware of an individual's goal, the individual is more likely to be motivated to attain the goal and, thus, will have a greater degree of commitment. Having others aware of an individual's goal may motivate one to avoid embarrassment associated with failure to achieve a

goal. Several studies have found publicly stated goals produced more commitment than privately stated goals (Hayes, Rosenfarb, Wulfert, Munt, Korn, & Zettle, 1985; Hollenbeck et al., 1989).

Goal Intensity. Goal intensity refers to the amount of planning put forth in formulating the goal or the action necessary to achieve it (Locke & Latham, 1990). The more mental effort one puts forth in developing goals and ways to achieve goals, the more committed one should be to the goals. Very little research has been done to investigate the effect of goal intensity on goal commitment. The only study to date that directly measured commitment found a significant relationship between goal intensity and goal commitment (Kolb, Winter, & Berlew, 1968).

Locus of Control. An external locus of control would lend one less likely to believe goal attainment is under one's control. An internal locus of control would suggest one is more likely to perceive the goal as attainable through effort. An internal locus of control should be associated with higher commitment than an external locus of control. Hollenbeck et al. (1989) found subjects with an internal locus of

control had higher commitment to difficult goals than subjects with an external locus of control.

Task Complexity. Commitment may be affected by characteristics of the task. Earley (1985) and Steers and Porter (1974) found commitment decreased when tasks were very complex compared to commitment on less complex tasks. A meta-analysis by Wofford, Goodwin, and Premack (1992) found an inverse relationship between commitment and task complexity.

Need for Achievement. Hollenbeck and Klein (1987) suggested personal variables may be likely to lead to greater commitment. Specifically, they predicted individuals with high need for achievement (nAch) would exhibit higher commitment for challenging goals than individuals with low need for achievement. The authors concluded further research is needed to discover whether antecedents such as need for achievement may influence goal commitment.

Kernan and Lord (1988) have investigated whether nAch had a moderating effect on goal commitment. The researchers assigned subjects to either a participatory or assigned goal condition and had subjects complete a multitrial clerical task. All subjects received goal discrepant performance feedback after the first trial.

The assigned condition led to higher commitment than the participatory condition. A moderating effect was found for nAch. Subjects high in nAch were more goal committed than low nAch subjects and performed better in the participatory condition than subjects low in nAch.

Hollenbeck, Williams, and Klein (1989) assigned subjects to either a public or private condition with goals being assigned or self-set. Subjects' performance in academic courses during a quarter was selected for use as the experimental task. The study measured nAch with a 20 item scale from the Personality Research Form (Jackson, 1974). A significant correlation of $r = .25$ between nAch and commitment was reported. The relationship between nAch and commitment was stronger when goals were self-set than when goals were assigned.

Johnson and Perlow (1992) had subjects perform a complex flight simulation task. The Need for Mastery, Need for Work, and Competitiveness subscales from the Work and Family Orientation Scale (Helmreich & Spence, 1978) were used to measure nAch as a multidimensional construct. Need for Mastery was found to be significantly related to goal commitment. Since only

assigned goals were used, further research is needed to assess the effect of nAch components on self-set goals. It is unclear from this study whether a multiple component view of nAch contributes to the understanding of the nAch-commitment relationship beyond what has been obtained with unidimensional measures. The authors conclude further work is needed to investigate the nAch-commitment relationship.

These three studies are the only ones to date to investigate the nAch-commitment relationship. The findings suggest high nAch subjects are more goal committed than low nAch subjects. The Hollenbeck et al. (1989) study was the only one that incorporated self-set goals. Further research is needed to determine if this relationship holds with a different sample and experimental task using self-set goals.

Social Influence.

One factor which has not been studied extensively in the context of goal setting is social influence. A primary purpose of this study was to test the effect of social influence on commitment. Turner (1991) broadly defined social influence as "the processes whereby people directly or indirectly

influence the thoughts, feelings, and actions of others" (p. 1). Social influence has been viewed as a two process model of normative and informational influences. Normative influence has been defined as,

> "compliance, in which one conforms outwardly but not necessarily inwardly to the expectations of others; it is specifically a group process of conformity to social pressure, based on the power of others to reward and punish, and socially motivated by a desire for acceptance and approval and to avoid rejection and hostility" (Turner, 1991, p. 37).

Informational influence has been defined as follows:

> "...true influence, i. e. influence leading to private acceptance and internalization, long lasting attitude change, is informational in nature; others' responses are influential to the degree they provide evidence about reality; others are informative to the extent that they are perceived as similar, expert, trustworthy, credible, ect.; the process is one of social comparison, motivated by the desire to be correct, to achieve subjective validity for one's beliefs" (Turner, 1991, p. 37).

Several studies have investigated the impact of normative information on performance. Normative information has generally been others' typical

performance on a given task. Subjects provided with normative information on a labeling task demonstrated higher performance than subjects in a no norm condition (Mitchell, Rothman, & Liden, 1985). Subjects provided with normative information on average group performance showed higher productivity on a clerical task than subjects not given normative information (Chung & Vickery, 1976). Simply telling subjects their performance will be compared to others has been found to increase performance (White, Mitchell, & Bell, 1977; Shalley, Oldham, & Porac, 1987). Subjects provided with high norms on a brainstorming task performed significantly better than subjects in a low norm or control condition (Meyer & Gellatly, 1988). It is possible that these subjects set goals internally after being provided with normative information. None of these studies measured goal commitment so it is impossible to tell if normative information served to enhance goal commitment.

All of these studies show an effect of normative influence on performance, but not in the context of goal setting. Goal setting theory has been shown to be a powerful performance motivator. Given the importance of goal commitment to goal setting theory,

the scheduling task. The student was seated so subjects were unable to see the task being performed. In the film, an experimenter counted the number of schedules completed by the student. Half of the subjects observed a high performing role model and the rest saw a low performing role model. Subjects were also randomized into high choice, moderate choice, and no choice conditions. Subjects in the high and moderate choice groups were encouraged to set difficult goals, whereas, subjects in the no choice group were assigned a goal. Subjects in the high choice group were allowed to select any strategy for completing the task. The moderate and no choice groups were assigned a strategy. The subjects completed a pre-task questionnaire measuring goal acceptance and goal satisfaction and then completed the 15 minute scheduling task. A post-task questionnaire measuring goal acceptance, satisfaction, and perceived degree of choice in goal setting was completed. Analysis of variance results indicated significant main effects for role model ($F(1,114) = 45.14$, $p < .001$) and choice ($F(2,114) = 29.79$, $p < .001$) on goal acceptance. Goal acceptance in the high role model condition was

higher goals than subjects not provided with task experience. A nearly significant interaction of task condition by model performance was reported (F= 3.30, p < .08). A significant correlation was found between reported satisfaction and the discrepancy between one's own performance and the model's performance (r = -.42, p < .001). Subjects in comparable conditions performed higher when exposed to the high performing model than the low performing model.

In the Rakestraw and Weiss (1981) study, subjects received normative influence through high or low performing models and informational influence through demonstration of how to perform the task. Since all subjects received informational influence it is impossible to determine normative influence's independent effect on performance. The study did not measure commitment.

Earley and Kanfer (1985) attempted to determine if normative influence would affect performance, goal satisfaction, and goal commitment. Subjects were provided with general instructions on how to perform a class scheduling task. The subjects were given 5 minutes to practice the task and then all subjects viewed a 10 minute film of a student engaging in

the scheduling task. The student was seated so subjects were unable to see the task being performed. In the film, an experimenter counted the number of schedules completed by the student. Half of the subjects observed a high performing role model and the rest saw a low performing role model. Subjects were also randomized into high choice, moderate choice, and no choice conditions. Subjects in the high and moderate choice groups were encouraged to set difficult goals, whereas, subjects in the no choice group were assigned a goal. Subjects in the high choice group were allowed to select any strategy for completing the task. The moderate and no choice groups were assigned a strategy. The subjects completed a pre-task questionnaire measuring goal acceptance and goal satisfaction and then completed the 15 minute scheduling task. A post-task questionnaire measuring goal acceptance, satisfaction, and perceived degree of choice in goal setting was completed. Analysis of variance results indicated significant main effects for role model ($F(1,114) = 45.14$, $p < .001$) and choice ($F(2,114) = 29.79$, $p < .001$) on goal acceptance. Goal acceptance in the high role model condition was

significantly greater than goal acceptance in the low role model condition. The ANOVA on goal satisfaction yielded significant main effects for role model ($F(1,114) = 34.59$, $p < .001$) and choice ($F(2,114) = 31.33$, $p < .001$). Goal satisfaction in the high role model condition was significantly greater than the low role model condition. The ANOVA on performance found significant main effects for role model ($F(1,114) = 47.38$, $p < .001$) and choice ($F(2,114) = 54.99$, $p < .001$). Subjects in the high and moderate choice groups performed significantly better than the no choice group. In summary, this study shows normative influence can affect goal commitment.

This study used the observed performance of another student as a form of normative influence in a goal setting context. Most studies investigating normative influence use real or fictitious performance standards. Other forms of normative influence exist but have yet to be studied in a goal setting context. These include the feelings, opinions, and perceptions of others.

The importance of goal setting and social influence have been established. The current study

assessed the effect of normative influence on commitment and performance in a goal setting context. The current study investigated whether the opinions of a confederate regarding the experimental task will effect goal commitment and/ or performance in a goal setting context.

Social Influence and Need for Achievement.

Murray (1938) introduced a systematic approach to measuring human motives with the goal of identifying the fewest motives that could account for the majority of human behaviors. The approach developed was the Thematic Apperception Test (TAT) which was used to identify twenty different needs. Of the original needs, only need for achievement, need for affiliation, and need for power have received extensive study. Only need for achievement (nAch) will be discussed further since the other two needs were not relevant to the present study.

Need for achievement refers to a motive to accomplish something. Typically, one would expect those high in nAch to overcome obstacles and attain a high standard of performance due to a desire to succeed in an endeavor. McClelland (1987) suggests a

performance-nAch relationship for high nAch individuals functions only when an achievement incentive or challenge exists. In other words, nAch will have no effect on performance when the task is very easy or too difficult. An achievement incentive is present when the individual gets satisfaction from doing something better for his/her own sake or to show he/she is more capable of doing something (McClelland, 1987). Thus, intrinsic satisfaction is associated with successful performance. When extrinsic rewards are provided for performing a task, intrinsic satisfaction tends to decrease, and subjects high in nAch do not perform better than those low in nAch (Deci, 1975).

Several studies have investigated the effect of social influence on nAch and performance. Wendt (1955) assigned subjects to an experimenter reminder or experimenter no reminder condition, and had subjects perform complex mental arithmetic problems. In the experimenter reminder condition, subjects were given constant reminders of what they should be doing. No differences in performance were found in the task reminder condition for high and low nAch subjects. When subjects were not bothered by task reminders,

high nAch subjects performed significanty better than low nAch subjects.

McKeachie (1961) studied the effect of teaching style on nAch and grade performance. When external achievement cues provided by the instructor were high, students high in nAch tended to do less well in the course than students low in nAch. When the instructor did not encourage competition or high standards of performance, students high in nAch tended to do better in the class than low nAch students. These studies tend to suggest social influence lowers performance for subjects high in nAch. While these studies are related to standards of performance, they did not incorporate emotive social influence. Thus, it was difficult to draw conclusions about how nAch might interact with social influence.

Social Influence and Need for Approval.

D. P. Crowne began an extensive series of experiments in 1959 to examine individual differences in the tendency to describe one's self in favorable, socially desirable terms in order to gain the approval of others. The Marlowe-Crowne Social Desirability Scale (MCSDS) was developed to investigate

this aspect of personality (Crowne & Marlowe, 1960). After establishing adequate reliability and validity of the measure, Marlowe and Crowne (1961) had subjects complete the MCSDS and then perform a spool packing task. Subjects were then asked to rate how enjoyable the task was, how much they had learned, the degree of scientific importance, and the likilihood of participating in a similiar experiment. Subjects scoring high on the MCSDS rated each measure significantly higher than subjects scoring low on the MCSDS.

The experimenters suggested the results support a theoretical rationale which views socially desirable responding on personality tests as the expression of a more general need for approval (nAp). The findings of this study and several other experiments led to the formation of the personality construct of nAp, which implies, "(a) people differ in their need to be thought well of by others; and (b) for those whose need is higher, we could assume a generalized expectancy that approval satisfactions are attained by engaging in behaviors which are culturally sanctioned and approved (and by avoiding those responses which are not)" (Crowne, 1964, pg. 27).

Several studies have been done investigating social influence and nAp. Deutsch and Lamberti (1986) either socially rewarded or punished subjects after completion of the MCSDS. In the reward condition, the subject was thanked in a pleasant tone of voice accompanied by a smile. In the punishment condition, the subject was not thanked and the experimenter maintained a cold facial expression. After the manipulation, subjects encountered a confederate who dropped a stack of books. High nAp subjects were more likely to help the confederate pick up the books when previously rewarded than when previously punished. Low nAp subjects helping behavior did not differ significantly in the two conditions.

Russell and Pigat (1991) had subjects view a video of ice hockey containing numerous fights. The video was viewed with a confederate who either supported the violence, watched passively, or deplored the violence. A significant remarks by social desirability interaction was found. High nAp subjects displaced more aggression than low nAp subjects in the confederate supportive condition. High nAp subjects also rated the video as more violent than low nAp subjects.

Satow (1975) asked female subjects to make donations to a research fund under either private or public conditions. High nAp subjects donated more in the public condition than low nAp subjects.

Coady and Brown (1978) assigned subjects to either a normative condition (comparison to peer group), competitive condition (award for above norm performance), or no incentive condition and had subjects perform a number cancellation task. High nAp subjects performed better in the normative condition and low nAp subjects performed more poorly in the normative condition. These studies suggest high nAp subjects are more susceptable to social influence than low nAp subjects.

Summary of the Literature.

Self-set goals have been shown to effectively improve performance on a wide variety of tasks in numerous settings. Goal commitment has been found to be an important element of goal setting theory. High commitment has been empirically linked with improved performance as compared to low commitment (Locke & Latham, 1990). Several factors that affect goal commitment including locus of control and publicness

have been identified (Hollenbeck et al., 1989). However, one factor that has not been extensively studied in a goal setting context is normative social influence and its effect on goal commitment and performance. A few studies have reported individuals with high nAch show higher commitment and improved performance compared to people with low nAch (Johnson & Perlow, 1992; Kernan & Lord, 1988). Several studies suggest high nAp subjects are more susceptable to social influence as compared to low nAp subjects (Coady & Brown, 1978; Russell & Pigat, 1991; Satow, 1975). The variables of social influence, nAch, and nAp have not been studied together in a goal setting context.

Purpose of the Study.

This study investigated the normative influence of opinion and its effect on goal commitment and performance in a goal setting context. A significant main effect for normative influence was expected to be found. It was hypothesized that subjects exposed to a positive opinion of the task would show increased performance and commitment as compared to subjects exposed to a neutral opinion of the task.

It was also hypothesized that subjects exposed to a negative opinion of the task would show decreased performance and commitment as compared to subjects exposed to neutral opinion of the task.

Additionally, the moderating effects of nAch and nAp on the social influence-performance relationship were explored. A significant main effect for nAch was expected to be found. It was hypothesized high nAch subjects would have increased performance and commitment compared to low nAch subjects. A significant main effect for nAp was also expected to be found. It was hypothesized high nAp subjects would have increased performance and commitment compared to low nAp subjects.

Exploratory analyses of the potential interactions of social influence and the personality variables of nAch and nAp were also conducted. The lack of any literature directly related to this study impaired the ability to make any firm predictions.

The current study controlled for an effect of mood on the personality measures of nAch and nAp. Some clinical research suggests individuals who score high on depression measures also score high on clinical measures of nAch and nAp (Miranda & Persons,

1988; Miranda, Persons, & Byers, 1990). A depression measure was administered and then used as a covariate to control for an effect of mood on nAch and nAp. The study also controlled for the effect of preperformance on goal commitment and postperformance since preperformance would be expected to have an effect on goal commitment and postperformance.

In summary, the hypotheses to be tested were as follows:

1-) Subjects exposed to a positive opinion of the task would show increased performance and commitment as compared to subjects exposed to a neutral opinion of the task. Subjects exposed to a negative opinion of the task would show decreased performance and commitment as compared to subjects exposed to neutral opinion of the task.

2-) High nAch subjects would have increased performance and commitment compared to low nAch subjects.

3-) High nAp subjects would have increased performance and commitment compared to low nAp subjects.

Method

Subjects :

A power analysis was conducted using techniques described by Cohen (1992). The analysis indicated that 91 subjects would be needed with a medium effect size and an alpha = .05 for power to equal .80. This estimate took into account the total number of independent variables as well as the need to control for depression and preperformance. The subjects were 165 introductory psychology students enrolled at a midwestern private university who received extra credit for participating. The number of subjects was therefore sufficient to reach an adequate power level. Subjects were randomly assigned to either positive social influence (n=56), negative social influence (n=55), or neutral influence (n=54) conditions.

Task :

Subjects engaged in six trials of a word formation task. Each trial was approximately three minutes in duration. Subjects were provided with a set of seven letters for each trial and were expected to form words. Letter sets used were drawn from those used by Vance and Colella (1990). Each set was pilot

tested to ensure a similiar level of difficulty. Point values for letters using values from the game of Scrabble also suggested the sets were of similiar difficulty. Subjects had to adhere to four word formation rules. The word must be (a) from the English language (b) 2 or more letters long (c) other than a proper noun and (d) used in one form only. Order of letter sets was counterbalanced across subjects.

Procedure :

Each subject completed measures of need for achievement, need for approval, and mood (Manifest Needs Questionnaire, Marlowe-Crowne Social Desirability Scale, and Depression Adjective Check List Form D) prior to participating in the experimental task. Each subject completed an informed consent and then completed two 3 minute practice trials to familiarize him/her with the task and to provide a baseline for setting a goal. The subject was instructed to write down each word after it is formed and the total points as indicated by the sum of the numbers printed on the letters. The subject then summed the

point totals after each trial, and trials 1 and 2 were combined.

The subject was then asked to set a goal for the next 2 trials that was more difficult and challenging than the total score for the practice trials. The subject then completed trials 3 and 4 using the same procedure as trials 1 and 2.

The experimental manipulation of positive or negative social influence was presented after completion of trial 4. The subject was interrupted by a confederate who expressed either a positive, negative, or neutral opinion regarding the experimental task. The subject then completed a goal commitment measure.

The subject then set a goal based on his/her performance on trials 3 and 4. A subject who met or exceeded the previous goal was instructed to select a goal higher than the previous performance. A subject who failed to attain the previous goal was asked to try again to attain it. The subject completed trials 5 and 6 using the same format as trials 1-4. After completion of trial 6, the subject was asked if he/she noted anything unusual during the course of the experiment to serve as a brief manipulation

check. Forty-seven subjects reported a student had stopped by looking for the experimenter during the experiment. Instructions for the entire procedure were given on recorded audio tape instructions to control for a potential experimenter/ social influence confound.

Materials:

The Manifest Needs Questionnaire (Steers & Braunstein, 1976) was used to measure subjects' need for achievement. The authors report an alpha coefficient of internal reliability of .66 and a test-retest correlation of .72 over a two week period. The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) was used to measure need for approval. Crowne and Marlowe (1964) reported an internal consistency coefficient of .88 using the Kuder-Richardson 20 formula and a test-retest correlation of .88 over a one month period. Hollenbeck's goal commitment measure (Hollenbeck, Klein, O'Leary, & Wright, 1989) was used to measure goal commitment. Hollenbeck et al. (1989) report an alpha coefficient of .80 for internal reliability. The Depression Adjective Check List, Form D (DACL) was

used to measure mood state. Lubin (1981) reported an internal consistency coefficient of .81 for males and .85 for females for the test items. A data collection form designed for this study was used by subjects to record words formed and the word's associated point value. Subjects also recorded self-set goals on the data collection form. The actual forms can be found in Appendix A.

Analyses:

The dependent variables consisted of the goal commitment measure and performance on the word formation task. The independent variables were social influence, nAch, and nAp. Hierarchical regressions were conducted on the goal commitment measure and on points earned for word formation on the combined score for trials 5 and 6. Hierarchial regressions were performed controlling for depression and preperformance.

Results

Means and standard deviations were calculated for the variables of need for achievement (nAch), need for approval (nAp), depression (Dep), goal commitment (GC), preperformance, and postperformance (see Table 1).

Table 1

Means and Standard Deviations

	Mean	Std Dev
NACH	25.22	3.54
NAP	13.72	5.24
DEP	10.96	5.60
GC	23.24	3.74
PREPERF	127.29	33.89
POSPERF	136.10	32.52

N= 165.

Intercorrelations between the variables of nAch, nAp, depression, goal commitment, preperformance, and postperformance were also computed (see Table 2). Depression was significantly negatively correlated with nAch, (r= -.22, p < .01), nAp (r= -.33, p < .01), and goal commitment, (r= -.18,

$p < .05$). A significant positive correlation between nAch and nAp was found, ($r = .21$, $p < .01$). Goal commitment was significantly positively correlated with nAch, ($r = .38$, $p < .01$), nAp ($r = .17$, $p < .05$), and preperformance, ($r = .17$, $p < .05$). Preperformance and postperformance were also found to be significantly correlated, ($r = .45$, $p < .01$).

Table 2

Correlations Between Variables

	NACH	NAP	DEP	GC	PREPERF	POSPERF
NACH	1.0000	.				
NAP	.2096**	1.0000				
DEP	-.2192**	-.3298**	1.0000			
GC	.3778**	.1690*	-.1835*	1.0000		
PREPERF	-.0290	-.0398	-.0998	.1718*	1.0000	
POSPERF	-.0627	-.0467	.0220	.0170	.4464**	1.0000

* $p < .05$ ** $p < .01$

Goal Commitment as Dependent Variable:

Hierarchial regression analysis was used to determine the effect of social influence, nAch, and nAp on goal commitment. Main effects were first tested and the model was significant, ($F(3,161) = 9.60$,

$p < .0000$), resulting in an $R^2 = .151$, and an adjusted $R^2 = .135$. A significant effect of nAch was found, ($F(1,161) = 23.36$, $p < .0000$). Need for achievement explained 12.3% of the variance in goal commitment. No other significant effects were found. The results are presented in Table 3.

Because depression was found to correlate with the independent variables of nAch and nAp another regression controlling for the effect of depression was conducted. The model was significant ($F(4,160) = 7.52$, $p < .0000$), resulting in an $R^2 = .158$ and an adjusted $R^2 = .137$. Need for achievement was significant ($F(1,160) = 21.17$, $p = .0000$) and explained 11% of the variance in goal commitment. The results are presented in Table 4.

Table 3

Regression of Goal Commitment on nAch, nAp, and Social Influence: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	282.00712	.12305	23.35554	.0000
NAP	1	19.38093	.00846	1.60511	.2070
SOC	1	1.34586	.00059	.11146	.7389

Table 4

Regression of Goal Commitment Controlling for Depression: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	255.23734	.11137	21.16935	.0000
NAP	1	9.32666	.00407	.77355	.3804
SOC	1	1.77009	.00077	.14681	.7021

Because preperformance may have affected goal commitment, a regression analysis controlling for the effect of preperformance was conducted. The model was significant, ($F(4,160) = 9.17$, $p < .0000$), resulting in an $R^2 = .187$ and an adjusted $R^2 = .166$. A significant effect of nAch, ($F(1,160) = 24.79$, $p < .0000$), and preperformance, ($F(1,160) = 6.84$, $p = .009$) was found. Need for achievement accounted for 12.6% of the variance in goal commitment and preperformance accounted for 3% of the variance in goal commitment. The results are presented in Table 5.

Because preperformance and depression may have affected goal commitment, a regression analysis controlling for the effects of depression and preperformance was conducted. The model was

significant, ($F(5,159) = 7.45$, $p < .0000$), resulting in an $R^2 = .189$ and an adjusted $R^2 = .164$. A significant effect of nAch, ($F(1,159) = 22.81$, $p < .0000$), and preperformance, ($F(1,159) = 6.21$, $p < .01$) was found. Need for achievement accounted for 11.6% of the variance in commitment and preperformance accounted for 3% of the variance in commitment. The results are presented in Table 6. Need for achievement was significant when depression and preperformance were controlled and when they were not controlled. Social influence and nAp were not significant in any of the regressions. A regression analysis was also conducted to test for main effects as well as interactions controlling for depression and preperformance. No significant interactions were found. A significant effect of preperformance, ($F(1,155) = 6.07$, $p = .01$) was found (see Table 7).

Table 5

Regression of Goal Commitment Controlling for Preperformance: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	288.80980	.12602	24.78735	.0000
NAP	1	22.12345	.00965	1.89876	.1701
SOC	1	1.72080	.00075	.14769	.7013

Table 6

Regression of Goal Commitment Controlling for Depression and Preperformance: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	266.34152	.11622	22.80908	.0000
NAP	1	13.29026	.00580	1.13816	.2877
SOC	1	1.96200	.00086	.16802	.6824

Table 7

Regression of Goal Commitment Controlling for Depression and Preperformance: Main Effects and Interactions

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACHxNAP	1	14.72727	.00643	1.26761	.2620
NAPxSOC	1	3.99051	.00174	.34347	.5587
NACHxSOC	1	.00050	.00000	.00004	.9948
NACH	1	.89361	.00039	.07692	.7819
NAP	1	12.93845	.00565	1.11364	.2929
SOC	1	.00168	.00000	.00014	.9904

Postperformance as a Dependent Variable:

Hierarchial regression analysis was used to determine the effect of social influence, nAch, nAp, and goal commitment on postperformance. Main effects were first tested and the model was not significant, ($F(4,160) = .83$, $p = .51$). The results are presented in Table 8.

Because depression was found to correlate with the independent variables of nAch and nAp another regression controlling for the effect of depression was conducted. The model was not significant,

($F(5,159) = .66$, $p = .65$). The results are presented in Table 9.

Because preperformance may have affected postperformance, a regression analysis controlling for preperformance was conducted. The model was significant, ($F(5,159) = 8.91$, $p < .0000$), resulting in an $R^2 = .219$ and an adjusted $R^2 = .194$. A significant effect of preperformance was found, ($F(1,159) = 40.41$, $p < .0000$). Preperformance explained 19.9% of the variance in postperformance. A nearly significant effect of social influence was found, ($F(1,159) = 3.03$, $p = .08$). The results are presented in Table 10.

Because preperformance and depression may have affected postperformance, a regression analysis controlling for the effects of depression and preperformance was conducted. The model was significant, ($F(6,158) = 7.47$, $p < .0000$), resulting in an $R^2 = .221$ and an adjusted $R^2 = .191$. A significant effect of preperformance was found, ($F(1,158) = 40.72$, $p < .0000$). Preperformance accounted for 20% of the variance in postperformance. A nearly significant effect of social influence was found, ($F(1,158) = 2.94$, $p = .09$). The results are presented in Table 11.

The means were in the predicted direction for the positive, neutral, and negative conditions, (M's= 141 vs 134 vs 131).

Another regression controlling for effects of depression and preperformance was conducted to test for interactions. The model was significant, ($F(15,149)= 3.66$, $p = .0000$), resulting in an $R^2= .269$ and an adjusted $R^2= .196$. Several significant interactions were found. A significant four-way interaction of nAch x nAp x GC x Soc was found, ($F(1,149)= 5.01$, $p = .03$). The three-way interactions of nAp x Soc x GC, ($F(1,149)= 6.05$, $p = .02$), and nAp x nAch x Soc, ($F(1,149)= 5.79$, $p = .02$), were also significant. A significant two-way interaction of nAp x Soc was found, ($F(1,149)= 7.02$, $p = .008$). A significant effect of preperformance was found, ($F(1,149)= 38.27$, $p < .0000$). A nearly significant effect of social influence was found, ($F(1,149)= 2.75$, $p = .10$). No other significant effects were found. The results are presented in Table 12.

Table 8

Regression of Postperformance on nAch, nAp, Social Influence, and Goal Commitment: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	539.53017	.00311	.50817	.4770
NAP	1	257.32085	.00148	.24236	.6232
SOC	1	2249.51617	.01297	2.11876	.1475
GC	1	343.06073	.00198	.32312	.5705

Table 9

Regression of Postperformance Controlling for Depression: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	536.05246	.00309	.50174	.4798
NAP	1	242.46515	.00140	.22694	.6345
SOC	1	2249.14560	.01297	2.10517	.1488
GC	1	338.02854	.00195	.31639	.5746

Table 10

Regression of Postperformance Controlling for Preperformance: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	31.39552	.00018	.03685	.8480
NAP	1	32.70388	.00019	.03839	.8449
SOC	1	2582.22898	.01489	3.03114	.0836
GC	1	377.14211	.00217	.44271	.5068

Table 11

Regression of Postperformance Controlling for Depression and Preperformance: Main Effects

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	9.08272	.00005	.01063	.9180
NAP	1	.13796	.00000	.00016	.9899
SOC	1	2510.62790	.01448	2.93696	.0885
GC	1	328.47301	.00189	.38425	.5362

Table 12

Regression of Postperformance Controlling for Depression and Preperformance: Main Effects and Interactions

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACHxNAPxGCxSOC	1	4259.11371	.02456	5.01038	.0267
NACHxNAPxGC	1	1129.30151	.00651	1.32850	.2509
NAPxSOCxGC	1	5142.96808	.02966	6.05014	.0150
NAPxNACHxSOC	1	4924.13536	.02840	5.79271	.0173
NACHxNAP	1	1190.21031	.00686	1.40015	.2386
NAPxSOC	1	5969.75744	.03443	7.02277	.0089
NACHxGC	1	54.28135	.00031	.06386	.8009
NAPxGC	1	1667.08490	.00961	1.96114	.1635
SOCxGC	1	2042.08410	.01178	2.40229	.1233
NACH	1	78.60164	.00045	.09247	.7615
NAP	1	1803.04805	.01040	2.12109	.1474
SOC	1	2337.62670	.01348	2.74996	.0994
GC	1	77.32293	.00045	.09096	.7634

Because significant intercorrelations were found between the independent variables, further analyses were conducted to test for multicollinearity. As suggested by Berry and Feldman (1988), regressions of each independent variable on all other independent variables were conducted. Large R^2s would indicate that a multicollinearity problem existed. The regressions of nAch (see Table 13) and nAp (see Table 14) resulted in an $R^2 = .184$ and an $R^2 = .132$ respectively. The regressions of social influence (see

Table 15) and depression (see Table 16) resulted in an R^2= .001 and an R^2= .139 respectively. The large R^2s for nAch, nAp, and depression suggest multicollinearity was a problem.

Table 13

Regression of nAch on Independent Variables

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NAP	1	23.01631	.01118	2.19438	.1405
SOC	1	15.23275	.00740	1.45229	.2299
GC	1	222.04003	.10788	21.16935	.0000
DEP	1	24.02587	.01167	2.29063	.1321

Table 14

Regression of nAp on Independent Variables

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	53.58490	.01189	2.19438	.1405
SOC	1	.23981	.00005	.00982	.9212
GC	1	18.88948	.00419	.77355	.3804
DEP	1	358.17146	.07949	14.66765	.0002

Table 15

Regression of Social Influence on Independent Variables

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	.99559	.00897	1.45229	.2299
NAP	1	.00673	.00006	.00982	.9212
GC	1	.10064	.00091	.14681	.7021
DEP	1	.14473	.00130	.21113	.6465

Table 16

Regression of Depression on Independent Variables

Source	DF	Sum of Squares	Rsq Chg	F	Sig F
NACH	1	63.26490	.01231	2.29063	.1321
NAP	1	405.10523	.07885	14.66765	.0002
SOC	1	5.83111	.00113	.21113	.6465
GC	1	33.88691	.00660	1.22694	.2697

Discussion

Goal Commitment:

It was hypothesized that subjects exposed to a positive opinion of the task would show increased

goal commitment and subjects exposed to a negative opinion of the task would show decreased goal commitment. The effect of social influence on goal commitment was not significant. Positive social influence was not related to higher goal commitment and negative social influence was not related to lower goal commitment. Hypothesis 1 was not supported. It would appear from these findings social influence is unrelated to goal commitment. It is possible that goal commitment is so internally oriented it may be resistant to external influences like others' opinions. Another possible explanation for this finding is that the positive and negative social influence manipulations were relatively weak. Subjects were only exposed to a positive, neutral, or negative opinion of the experimental task for approximately thirty seconds. The effect of social influence on goal commitment might have been significant if the manipulations would have been stronger and/or a larger sample size would have been used.

A second hypothesis stated that need for achievement (nAch) would be positively related to goal commitment. The results indicated nAch was positively related to goal commitment. Subjects with higher nAch

reported higher goal commitment. This finding provided support for Hypothesis 2 and is consistent with previous research (Hollenbeck et al., 1989, Johnson & Perlow, 1992). Need for achievement accounted for 11% of the variance in goal commitment. This finding was significant when controlling for depression and preperformance and when not controlling for depression and preperformance. This finding has implications for organizations using goal setting theory. Hiring individuals with a high need for achievement should be associated with high goal commitment and hiring individuals with a low need for achievement should be associated with low goal commitment.

Previous research indicates a positive relationship exists between goal commitment and performance. By employing workers with high need for achievement, organizations should have workers who are more goal committed which should lead to increased productivity.

A third hypothesis stated that need for approval (nAp) would be positively related to goal commitment. While nAp was positively correlated with goal commitment at the .05 level, the effect of nAp on goal commitment was not significant in any of the regression models. Hypothesis 3 was not supported. It

was believed subjects high on nAp would tend to behave in socially desirable ways, and rating oneself highly on a goal commitment questionnaire was thought to be a socially desirable behavior. It could also be possible that nAp is not associated with goal commitment. No significant interactions were found for any of the regressions on goal commitment.

Postperformance:

It was hypothesized that subjects exposed to a positive opinion of the task would show increased performance and subjects exposed to a negative opinion fo the task would show decreased performance. A nearly significant effect of social influence on postperformance was found when controlling for depression and preperformance. One possible explanation for this finding is that the positive and negative social influence manipulations were relatively weak. Subjects were only exposed to a positive, neutral, or negative opinion of the experimental task for approximately thirty seconds. The effect of social influence on postperformance would probably have been significant if the manipulations would have been

stronger and/or a slightly larger sample size would have been used. These findings suggest that social influence may be an important factor in goal setting theory. When others express positive or negative opinions of a task, that opinion may affect performance. Positive influence should increase performance and negative influence should decrease performance. This has implications for organizations who use goal setting theory. In work environments, workers are regularly exposed to the opinions of others regarding work tasks. Exposure to negative opinions should result in reduced productivity and exposure to positive opinions should result in increased productivity. If this is the case, management should take steps to help foster positive opinions of the work task to enhance worker productivity. Further research needs to be conducted to determine whether the opinions of others have an effect on productivity.

A second hypothesis stated that nAch would be positively related to postperformance. The effect of nAch on postperformance was not found to be significant. Higher nAch was not related to higher postperformance. Hypothesis 2 was not supported. It is

possible that high nAch subjects were already performing at a high level on the baseline and preperformance trials, making it difficult to improve performance on the postperformance trials. It could also be possible nAch is unrelated to postperformance.

A third hypothesis stated that nAp would be positively related to postperformance. The effect of nAp on postperformance was not found to be significant. Higher nAp was not found to be related to higher postperformance. Hypothesis 3 was not supported. It was believed subjects high on nAp would tend to behave in socially desirable ways. Improving ones performance was thought to be a socially desirable behavior. Eliminating contact with the experimenter to control for a potential social influence confound may have decreased high nAp subject's need to behave in a socially desirable way. It is possible that increased contact with the experimenter would have produced the hypothesized results. It could also be possible that nAp is not associated with postperformance.

The effect of goal commitment on postperformance was not found to be significant. Higher goal commitment was not related to higher postperformance.

This finding is inconsistent with the goal setting theory research, which generally shows increased goal commitment is associated with increased performance. It may have been difficult to find a significant effect of commitment on postperformance because subjects generally are highly committed to the goals of the task, restricting the variability. In this study, sujects' scores ranged from 15 to 31 on a possible range of 5 to 35. Another explanation for not finding an effect may have been due to not controlling for goal difficulty level. Another explanation for not finding an effect might have been due to the factors discussed previously that affect commitment. Subjects set goals privately rather than publicly. Little planning was put forth during goal setting so goal intensity was low. Subjects may not have perceived a relationship between good performance and the attainment of an outcome creating low instrumentality.

Several interactions were found to be significant. However, tests of multicollinearity suggested the independent variables were significantly intercorrelated. The problem of multicollinearity made the interpreting of any significant interactions questionable, as

results of the regression would be expected to vary across samples. The main effects also need to be interpreted with caution due to multicollinearity.

Conclusions:

The analyses conducted in this study suggest the independent variable of need for achievement had a significant effect on goal commitment. This finding confirms previous research. This study contributes to the external validity of the nAch-goal commitment relationship by using a different task and sample. This study contributes to the literature by using self-set goals rather than assigned and/or participatively set goals.

The analyses conducted in this study also suggest the independent variable of social influence may have a significant effect on postperformance. This suggests that the opinions of others about the task might affect performance on the task. Further research needs to be conducted to determine whether goal setting theory needs to take into account the influence of others when investigating performance. Further research needs to be conducted using stronger positive and negative social influence manipulations using different

tasks and populations. Further research in which the effects of various independent variables can be interpreted more directly also needs to be conducted due to the problem of multicollinearity in this study. Investigating the independent variables separately would eliminate the potential for a multicollinearity problem to arise. This study contributes to the literature by being the first to investigate the effect of other's opinion of task on goal commitment and performance.

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Appendix A

Experimental Manipulations

Experimental Manipulations

Positive Social Influence:

Excuse me. Have you seen the experimenter? I forgot to get my extra credit point form filled out. (pause for subject's response) You're doing the same experiment I did. I really enjoyed participating in that experiment. Forming words with letters was interesting. It was a real challenge to try and earn higher scores. (pause for subject's response) Well, I guess I'll try later to find that experimenter.

Negative Social Influence:

Excuse me. Have you seen the experimenter? I forgot to get my extra credit point form filled out. (pause for subject's response) You're doing the same experiment I did. I really hated participating in that experiment. Forming letters with words was boring. It wasn't really a challenge to try to earn higher scores. (pause for subject's response) Well, I guess I'll try later to find that experimenter.

Neutral Social Influence:

Excuse me. Have you seen the experimenter? I forgot to get my extra credit point form filled out. (pause for subject's response) You're doing the same experiment I did. Well, I guess I'll try later to find that experimenter.

Appendix B

Experimental Task Instructions

Instructions

Welcome to the anagram experiment. You will need to listen and follow directions closely as this experiment will be facilitated through audio tape. Please read and fill out the informed consent sheet on top of the packet in front of you. You need to stop the tape until this is completed and then press play to restart the tape.

By now, you have completed the informed consent and are ready to begin the experiment. Your task will be to form words from given sets of letters. You will have to follow four word formation rules. (1) The word must be from the English language. (2) The word must be two or more letters long. (3) The word can not be a proper noun such as Bob or Betty. (4) The word can be used in one form only. The rules for word formation are taped to the table to serve as a reminder. If you need to review the rules, please stop the tape and then press play when you understand the rules. If you understand the rules, continue on.

Turn to the second page of your packet. On this form you will see several columns. There is a word

formed column and a points column. On this form you will record each word as it is formed. Indictated on each letter is a point value. You will add up the points earned for each word after it is formed by summing the points on the letters for each word. Remember, after forming a word, write it down under the "Word Formed" column, add up the points on the letters, and enter the score under the "Points" column.

You are now ready to start Trial #1. Pick up the envelope located next to the number one taped to the table and remove the letters. You have three minutes to form as many words as you can. Begin! (Three minutes expire)

Stop!

You now need to add up the total points earned on trial #1. A calculator has been provided to assist you. Stop the tape until you have completed your calculations. Stop now.

You have now calculated your total points for trial #1. Put the letters back in the envelope and put the envelope back next to the number one taped to the table. Pick up the envelope next to the number two taped to the table and remove the

letters. You have three minutes to form as many words as you can. Begin!

(three minutes expire)

Stop!

You now need to add up the points earned on trial #2 and write the total in the space labeled total points (#2) and then add the total points for trials #1 and #2. Stop the tape until you have completed your calculations. Stop now.

You have now calculated the total points earned on trials #1 and #2. You now need to set a goal for the total points you will try to earn on trials #3 and #4. The goal must be more difficult and challenging than the total score of trials #1 and #2. Turn to page number three of your packet and enter your difficult, challenging goal on the blank labeled as goal for trials #3 and #4.

You have now set a goal for trials #3 and #4. Put the letters back in the envelope and put the envelope back next to the number two taped to the table. Pick up the envelope next to the number three taped to the table and remove the letters. You have three minutes to form as many words as you can. Begin!

(three minutes expires)

Stop!

You now need to add up the total points earned on trial #3 and stop the tape until you have completed your calculations. Stop now.

You have now calculated the total points for trial #3. Put the letters back in the envelope and put the envelope back next to the number three taped to the table. Pick up the envelope next to the number four taped to the table and remove the letters. You have three minutes to form as many words as you can. Begin!

(three minutes expire)

Stop!

You now need to add up the points earned on trial #4 and then add the total points for trials #3 and #4. Stop the tape until you have completed your calculations. Stop now.

(experimental manipulation of social influence)

Turn to page number four of your packet and complete the questionnaire. Stop the tape until you have completed the questionnaire. Stop now.

Turn back to page number three of your packet and compare the total points earned for trials #3

and #4 to the goal you set. If you met or exceeded your goal for trials #3 and #4, you need to select a goal higher than your total score on trials #3 and #4. If you did not achieve your goal, try again to attain it. Turn to page number six and enter your goal.

You have now set a goal for trials #5 and #6. Put the letters back in the envelope and put the envelope back next to the number four taped to the table. Pick up the envelope next to the number five taped to the table and remove the letters. You have three minutes to form as many words as you can. Begin!

(three minutes expire)

Stop!

You now need to add up the total points earned on trial #5 and stop the tape until you have completed your calculations.

You have now calculated total points earned for trial #5. Put the letters back in the envelope and put the envelope back next to the number five taped to the table. Pick up the envelope next to the number six taped to the table and remove the

letters. You have three minutes to form as many words as you can. Begin!

(three minutes expire)

Stop!

You now need to add up the total points earned on trial #6 and then add the total points for trials #5 and #6. Stop the tape until you have completed your calculations.

Appendix C

Manifest Needs Questionnaire

Please circle the one answer that best represents your response to each question.

1. I do my best work when my job assignments are fairly difficult

Always Almost always Usually Sometimes Seldom Almost never Never

2. When I have a choice, I try to work in a group instead of by myself

Always Almost always Usually Sometimes Seldom Almost never Never

3. In my work assignments, I try to be my own boss

Always Almost always Usually Sometimes Seldom Almost never Never

4. I seek an active role in the leadership of a group

Always Almost always Usually Sometimes Seldom Almost never Never

5. I try very hard to improve on my past performance at work

Always Almost always Usually Sometimes Seldom Almost never Never

6. I pay a good deal of attention to the feelings of others at work

Always Almost always Usually Sometimes Seldom Almost never Never

7. I go my own way at work, regardless of the opinions of others

Always Almost always Usually Sometimes Seldom Almost never Never

8. I avoid trying to influence those around me to see things my way

Always Almost always Usually Sometimes Seldom Almost never Never

9. I take moderate risks and stick my neck out to get ahead at worl

Always Almost always Usually Sometimes Seldom Almost never Never

10. I prefer to do my own work and let others do theirs

Always Almost always Usually Sometimes Seldom Almost never Never

11. I disregard rules and regulations that hamper my personal freedor

Always Almost always Usually Sometimes Seldom Almost never Never

12. I find myself organizing and directing the activities of others

Always Almost always Usually Sometimes Seldom Almost never Never

13. I try to avoid any added responsibilities on my job

Always Almost always Usually Sometimes Seldom Almost never Never

14. I express my disagreements with others openly

Always Almost always Usually Sometimes Seldom Almost never Never

15. I consider myself a "team player" at work

Always Almost always Usually Sometimes Seldom Almost never Never

16. I strive to gain more control over the events around me at work

Always Almost always Usually Sometimes Seldom Almost never Never

17. I try to perform better than my co-workers

Always Almost always Usually Sometimes Seldom Almost never Never

18. I find myself talking to those around me about non-business related matters

Always Almost always Usually Sometimes Seldom Almost never Never

19. I try my best to work alone on a job

Always Almost always Usually Sometimes Seldom Almost never Never

20. I strive to be "in command" when I am working in a group

Always Almost always Usually Sometimes Seldom Almost never Never

Appendix D

Marlowe-Crowne Social Desirability Scale

Please circle True or False for each question

1. Before voting I throughly investigate the qualifications of all the candidates. T or F

2. I never hestitate to go out of my way to help someone in trouble. T or F

3. It is sometimes hard for me to go on with my work if I am not encouraged. T or F

4. I have never intensely disliked anyone. T or F

5. On occasion I have had doubts about my ability to succeed in life. T or F

6. I sometimes feel resentful when I don't get my way. T or F

7. I am always careful about my manner of dress. T or F

8. My table manners at home are as good as when I eat out in a restaurant. T or F

9. If I could get into a movie without paying and be sure I was not seen, I would probably do it. T or F

10. On a few occasions, I have given up doing something because I thought too little of my ability. T or F

11. I like to gossip at times. T or F

12. There have been times when I felt like rebelling against people inauthority even though I knew they were right. T or F

13. No matter who I'm talking to, I'm always a good listener. T or F

14. I can remember "playing sick" to get out of something. T or F

15. There have been occasions when I took advantage of someone. T or F

16. I'm always willing to admit when I make a mistake. T or F

17. I always try to practice what I preach. T or F

18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people. T or F

19. I sometimes try to get even, rather than forgive and forget. T or F

20. When I don't know something I don't at all mind admitting it. T or F

21. I am always courteous, even to people who are disagreeable. T or F

22. At times I have really insisted on having things my own way. T or F

23. There have been occasions when I felt like smashing things. T or F

24. I would never think of letting someone else be punished for my wrongdoings. T or F

25. I never resent being asked to return a favor. T or F

26. I have never been irked when people expressed ideas very different from my own. T or F

27. I never make a long trip without checking the safety of my car. T or F

28. There have been times when I was quite jealous of the good fortune of others. T or F

29. I have almost never felt the urge to tell someone off. T or F

30. I am sometimes irritated by people who ask favors of me. T or F

31. I have never felt that I was punished without cause. T or F

32. I sometimes think when people have a misfortune they only got what they deserved. T or F

33. I have never deliberately said something that hurt someone's feelings. T or F

Appendix E

Hollenbeck's Goal Commitment Measure

Please circle the number above the term most closely associated with your response to each of the following questions:

1. It's hard to take this goal seriously.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

2. It's unrealistic for me to expect to reach this goal.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

3. It is quite likely that this goal may need to be revised, depending on how things go.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

4. Quite frankly, I don't care if I achieve this goal or not.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

5. I am strongly committed to pursuing this goal.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

6. It wouldn't take much to make me abandon this goal.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

7. I think this goal is a good goal to shoot for.

1----------2----------3----------4----------5

strongly agree neutral disagree strongly
agree disagree

Appendix F

Data Collection Forms for Experimental Task

Trial #1 Word Formed	Points	Trial #2 Word Formed	Points
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
Total points (#1)	____	Total points (#2)	____
		Total points (#1)	____
		Sum of #1 & #2	____

Goal for Trials #3 & #4 _____

Trial #3 Word Formed	Points	Trial #4 Word Formed	Points
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
Total points (#3)	____	Total points (#4)	____
		Total points (#3)	____
		Sum of #3 & #4	____

Goal for Trials #5 & #6 _____

Trial #5 Word Formed	Points	Trial #6 Word Formed	Points
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
Total points (#5)	____	Total points (#6)	____
		Total points (#5)	____
		Sum of #5 & #6	____